[B.3] Web sites

There are thousands of independent TI calculator web sites. These are the best. In my opinion, of course.

Visual Mathematics Illustrated by the TI-92 and the TI-89

http://www.imaxx.net/~gdorner/visual/

http://206.67.72.201/catalog/np/feb00np/2-287-59685-2.html

These two sites describe an excellent mathematics book written by George Dorner, Jean Michel Ferrard, and Henri Lemberg, and published by Springer-Verlag. As far as I know, this is the only 'advanced' mathematics book for the 89/92+. From the description:

> *Here is a selection of basic and advanced mathematics, unified by common themes and supported by graphical and formal calculations provided by the TI-92, the TI-92 Plus, and the TI-89 graphing calculators.*
>
> *The topics of mathmatics covered are those of higher level university courses for students of mathematics, computer science, physics, engineering and other sciences...*
>
> *Topics covered are in the fields of classical analysis and linear algebra, and in the overlap of the two. Chapters are devoted to discrete dynamical systems, differential equations, Fourier series, and approximation and interpolation theory.*

This book is expensive, but worth it. If you don't care to buy it for yourself, you could ask your school or local library to purchase it. It is a thorough, involving and accessible introduction to many fascinating and useful areas of mathematics.

Stephen Byrne's List of TI sites

http://www.rit.edu/~smb3297/ti/

A nice list of TI oriented sites categorized by math and engineering topics.

Olivier Miclo's ti-cas site

http://www.ti-cas.org/

One of the premium math sites. Emphasis on calculus, trigonometry, matrices and polynomials. Too much good stuff for me to summarize!

Roberto Perez-Franco's Symbulator site

http://sq.calc.org

Here you can get the most powerful programs available for the 89/92+. Symbulator; a symbolic circuit simulation program. Diffeq; Lars Frederiksen's differential equation solver, includes solutions to multiple differential equations. Advanced LaPlace: another solid piece of work by Lars which solves for LaPlace transforms and inverses. Also: Fourier transform programs, state space program, discrete Fourier transform and inverse. You can also get Lars' RPN program here, which implements an RPN interface for the HW1 89/92+.

S.L. Hollis' TI-89/92 math site

http://www.math.armstrong.edu/ti92/

Lots of very good math programs. Single and multi-variable calculus, linear algebra, differential equations, probability, Gaussian quadrature and special functions. Very, Very Good Site!

Frank Westlake's site

http://frank.westlake.org/ti/

Several calculus functions, including directional derivative, gradient, partial and total derivatives, multivariable limits, Taylor approximations for multi-variable functions. Notes on using Var-Link to provide fast program and function documentation. Internet sockets to send and receive email with your calculator. Number base conversions. Roman numeral conversions. Image editor. Remote control with scripts. Lots of utilities for converting text files, including BMP, RTF, PIC, TEXT and STR formats. You must disable Javascript in your web browser to use Frank's site.

Jack Hanna's Iview site

http://users.bergen.org/~tejohhan/iview.html

Get Jack Hanna's *Iview* program here. The program runs on a PC and converts graphics files to PIC variables which can be viewed and manipulated on the calculator.

Rusty Wagner's site

http://rusty.acz.org/

Go here for the Virtual TI emulator (VTI). This is PC software that emulates the calculator. You'll need to do a ROM dump from your calculator to run it. 'ROM dump' means uploading the calculator ROM image to the PC with a GraphLink cable. ROM images are not legally available by any other means.

The advantage to using the emulator is that you can test programs before downloading them to your calculator. This can save battery life.

Techno-Plaza

http://www.technoplaza.net/

A very complete comparision between the TI-89 and the HP49G, with little or no bias. Some math programs. Good assembly programming tutorials.

SoftWarehouse advanced functions

ftp://ftp.ti.com/pub/graph-ti/calc-apps/92/swh/

Advanced math functions for the 89/92+. Although this was written for the original TI92, and many of these functions are now built into the 89/92+, there is still lots of good stuff here. In particular, the code style is clever and efficient - you can learn a lot about programming by examining these programs.

TI redesigned the web site in March 2001. The little remaining description of this function packages is at *http://education.ti.com/product/tech/92/faqs/faq20595.html*

TI calculator program archives

http://education.ti.com/student/coll/down/archive.html

Programs written by users and submitted to TI. Includes the inferential statistics package for the 89/92+.

TI 89 Users Group - TAMUK math club

http://www.tamuk.edu/mathclub/

This is another top-tier site. Lots of math programs in all the usual categories, but also other programs in science, engineering and CBL/CBR. Does not appear to accept submissions right now. Some programs are original, some have been collected from other sources, and modified for various reasons.

Bhuvanesh Bhatt's site

http://triton.towson.edu/~bbhatt1/ti/

Several TI-92 PLUS advanced math programs, including: Cauchy principal value of an integral, a differential equation graphing utility, a multiple linear regression function, a special functions package, a tensor analysis package, a Christoffel symbol package, and a complex analysis graphing package. Bhuvanesh also has a special functions package that implements a great many special functions. You can also get E.W.'s 89/92+ EquationWriter (EQW) here. This site also hosts this tip list.

Stuart Dawson's surverying software

http://www.dawson-eng.demon.co.uk/nexus/

Surveying software for working surveyors. The more powerful versions are *not* free, but there is a free version with reduced functionality.

Andrew Cacovean's tip list & examples site

http://www.geocities.com/TI_TipList/

Andrew hosts the web version of this tiplist, and you can also get the current version of the 89/92+ wishlist there. Andrew also has some very good tutorials on using the 89/92+ to solve basic and more advanced problems.

Kevin Kofler's web site

http://ti89prog.kevinkofler.cjb.net/

This is where to go to get Kevin's extremely handy *autoaoff()* program, which disables the default alpha keyboard in dialog boxes on the TI-89. Kevin has also written programs to automatically close open parentheses on the entry line, map common functions to unused key combinations on the TI-89, balance chemistry equations, use log and semi-log axes on function plots, find exact solutions to cubic and quartic equations, make date calculations, manipulate grey-scale pictures and display calendars.

Paul Pollack's TI-92 Number theory programs

http://www.geocities.com/Hollywood/2979/ntheory.html

A small collection of number theory programs, including tests for primality, tests for probable primality, factoring by Pollards rho method and p-1 method, and fast square roots of large integers. Seems to be old but still useful.

Michael Lloyds TI calculator programs

http://www.hsu.edu/faculty/lloydm/ti/prgmtabl.html

This site includes many programs in algebra, trigonometry, statistics and calculus. Some specific programs include Molleweide's equation for checking triangles, conic equation graphing, probability distributions (binomial, F, Pearson-Moment correlation, Student's T, chi-squared), ANOVA and number base conversions.

Bubu's TI-92 programs

http://www.multimania.com/bubuw/index_e.html

Only one program on this site, an implementation of Conway's 'game of life' cellular automata simulator. What makes this notable is a large collection of 'starting patterns' for the simulation.